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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,982	06/29/2001	Peter L. Doyle	219.40022X00	6160

7590 03/18/2004  
Blakely Sokoloff Taylor & Zafman LLP  
12400 Wilshire Boulevard Seventh Floor  
Los Angeles, CA 90025

EXAMINER

MONESTIME, MACKLY

ART UNIT	PAPER NUMBER
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2676

DATE MAILED: 03/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/893,982

Applicant(s)

DOYLE, PETER L.

Examiner

Mackly Monestime

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Response to Amendment***

1. The amendment received on January 5, 2004 has entered and carefully considered.

Claims 1-24 are still pending in the application.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Devic et al (US Patent No. 6,054,993) in view Shirman et al (US Patent No. 5,50,960).

4. Devic et al was cited in the last office action.

5. As per claims 1-2, 8-9, 17 and 22, Devic et al substantially disclosed the invention as claimed, including a computer system comprising: a memory device to store a plurality of texture coordinates associated with vertices of three dimensional objects (Fig. 3; Item No. 104; col. 1, lines 31-44; lines 53-55; col. 4, lines 37-39), a graphics device to couple to said memory device and to process internal coordinates for display (Fig. 3; Item No. 104, 114 and 120); and a mapping system to appropriately route select ones of said plurality texture coordinates from said memory device to said graphics device (Fig. 4, Item No. 126).

Devic et al did not explicitly disclose a logical binding that is provided between the internal texture coordinate sets used by the graphics device and plurality of texture coordinates associated with vertices of three dimensional objects. However, Shirman et al disclosed a method

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and apparatus for performing dynamic texture mapping for complex surfaces in which a binding processes is performed to define the correspondence of the texture coordinates to the object coordinates, wherein the binding process binds the coordinates of the texture map in texture coordinate space (e.g., u, v coordinates) to predetermined coordinates of the object in modeling coordinate space (e.g., x, y, z, w coordinates) (Fig. 2; col. 1, lines 18-23; col. 4, lines 36-40).

Therefore, taking the combined teachings of Devic et al and Shirman et al as a whole, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the cited references because doing so would provide very useful quality measures and dynamic texturing for splines by separating the parameter coordinate space at the texture coordinate space.

6. As per claim 3, Devic et al disclosed said graphics device comprises a plurality of mapping engines each to process a separate one of said internal texture coordinate (Fig. 4, Item No. 126; Fig. 7, Item No. 70; col. 8, lines 7-12; lines 56-60).

7. As per claims 4-5, 7, 10-11, 19-20 and 24, Devic et al disclosed said graphics device comprises a plurality of registers; each corresponding to a separate one of said plurality of mapping engines (col. 9, lines 27-30; col. 10, lines 31-35).

8. As per claims 13 and 16, Devic et al substantially disclosed the invention as claimed, including as claimed, including a graphics device for creating an image base on internal texture coordinates received from a memory device (Fig. 3; Item No. 104, 114 and 120), said graphic device including a plurality of mapping engines (Fig. 4, Item No. 126; Fig. 7, Item No. 70; col. 8, lines 7-12; lines 56-60 ) and a plurality of registers, each register corresponding to a source of

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texture coordinate values for one of said mapping engine (col. 9, lines 27-30; col. 10, lines 31-35).

Devic et al did not explicitly disclose a logical binding that is provided between the internal texture coordinate sets used by the graphics device and plurality of texture coordinates associated with vertices of three dimensional objects. However, Shirman et al disclosed a method and apparatus for performing dynamic texture mapping for complex surfaces in which a binding processes is performed to define the correspondence of the texture coordinates to the object coordinates, wherein the binding process binds the coordinates of the texture map in texture coordinate space (e.g., u, v coordinates) to predetermined coordinates of the object in modeling coordinate space (e.g., x, y, z, w coordinates) (Fig. 2; col. 1, lines 18-23; col. 4, lines 36-40). Therefore, taking the combined teachings of Devic et al and Shirman et al as a whole, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have combined the cited references because doing so would provide very useful quality measures and dynamic texturing for splines by separating the parameter coordinate space at the texture coordinate space.

9. As per claim 14, Devic et al disclosed a display device to display said image based on an output of said graphics device (Fig. 3; Item No. 104, 114).

10. As per claims 6, 11, 15, 18, 21 and 23, Devic et al did not explicitly disclose: a default and one of said plurality of said texture coordinates in said memory device; to select ones of said plurality of said texture coordinates are transferred from said memory device to said mapping engines without transferring unselected ones of said plurality of texture coordinates. However, the concepts and associated advantages of having a default in computer system is well known in

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the art. Thus, default is an alternative value or option that is assumed when none has been specified; or it is implicit option that is assumed when no option is explicitly stated, or it is some parameter values supplied by a computer system when no explicit values are provided by a program; or it is a choice among exclusive alternatives made by the system when no explicit choice is specified by a user. Therefore, "official notice" has taken by the examiner that the use of a default in computer system is well known in the art.

### ***Response to Arguments***

Applicant's arguments with respect to claim have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant is required to give full consideration to these prior art references when responding to this office action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Migdal et al (US Patent No. 6,392,655) taught a fine grain multi-pass for multiple texture rendering.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mackly Monestime whose telephone number is (703) 305-3855.

The examiner can normally be reached on Monday to Thursday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bella Matthew, can be reached on (703) 308-6829.

**Any response to this action should be mailed to:**

Commissioner of Patent and Trademarks

Washington, D.C. 20231

**or faxed to:**

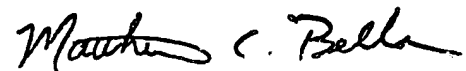
**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Mackly Monestime

Patent Examiner



**MATTHEW C. BELLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600**

March 9, 2004